



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0967; Directorate Identifier 2013-CE-042-AD; Amendment 39-17839; AD 2014-09-04]

RIN 2120-AA64

Airworthiness Directives; PIAGGIO AERO INDUSTRIES S.p.A Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2009-21-08 R1 for PIAGGIO AERO INDUSTRIES S.p.A Model P-180 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as cases of un-commanded operation of switched off nose-wheel steering system caused by internal leakage of a steering select/bypass valve. We are issuing this AD to require actions to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2013-0967>; or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590.

For service information identified in this AD, contact Piaggio Aero Industries S.p.A - Airworthiness Office, Via Luigi Cibrario, 4-16154 Genova-Italy; phone: +39 010 6481353; fax: +39 010 6481881; email: airworthiness@piaggioaero.it; Internet: <http://www.piaggioaero.com/#/en/aftersales/service-support>. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

FOR FURTHER INFORMATION CONTACT Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to certain PIAGGIO AERO INDUSTRIES S.p.A Model P-180 airplanes. That NPRM was published in the *Federal Register* on November 20, 2013 (78 FR 69597), and proposed to supersede AD 2009-21-08 R1, Amendment 39-16169 (75 FR 904, January 7, 2010).

The NPRM proposed to correct an unsafe condition for the specified products. The MCAI states that:

Cases of un-commanded operation of switched off nose-wheel steering system were reported. Internal leakage of a Steering Select/Bypass Valve, installed in the nose landing gear (NLG) Steering Manifold, was identified as a failure cause.

This condition, if not detected and corrected, could lead to loss of directional control on ground during take-off or landing, possibly resulting in a runway excursion.

To address this unsafe condition, EASA issued AD 2009-0129 to require repetitive functional checks of the Steering Manifold to verify internal leakage proofness and accomplishment of the functional check upon installation of a replacement Steering Manifold on an aeroplane.

Since that AD was issued, PAI issued Service Bulletin (SB) 80-0249 at revision 3, providing improved testing procedures.

For the reasons described above, this AD retains the requirements of EASA AD 2009-0129, which is superseded, but requires accomplishment of the functional checks in accordance with the improved procedures and additionally, before release to service of an aeroplane after installation of a replacement NLG. This AD also introduces an optional modification, which constitutes terminating action for the repetitive functional checks required by this AD.

This AD is revised to introduce a relieving compliance time for aeroplanes earlier inspected in accordance with EASA AD 2009-0129.

The MCAI can be found in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2013-0967-0002>.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and the FAA's response to each comment.

Request to Add an Additional Method of Compliance for Doing the Functional Test of the Nose Landing Gear (NLG) Steering Manifold

Carlo Cardu of PIAGGIO AERO INDUSTRIES S.p.A requested that we add an additional method of compliance for doing the functional tests of the NLG steering manifold required in paragraph (f)(1) of the proposed AD.

Carlo Cardu stated that following Part A1 of PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N. 80-0249, Rev. 3, dated July 22, 2013, should be allowed to show compliance for doing the functional tests required in paragraph (f)(1) of the proposed AD because the procedures in Part A1 are more thorough than the procedures in Part A2 and meet the full intent of Part A2.

We agree with the commenter and have changed the final rule AD action based on this comment.

Request to Clarify the Compliance Time for the Repetitive 165-Hour Time-in-Service (TIS) Functional Tests

Carlo Cardu of PIAGGIO AERO INDUSTRIES S.p.A requested that we clarify that each time a functional test of the nose landing gear (NLG) steering manifold is done following Part A1 of the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N. 80-0249, Rev. 3, dated July 22, 2013, that the time counting towards the required 165-hour TIS repetitive functional test is reset to zero.

We agree with the commenter and have changed the final rule AD action based on this comment.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously and any minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (78 FR 69597, November 20, 2013), for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 69597, November 20, 2013).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD will affect 112 products of U.S. registry. We also estimate that it will take about 2 work-hours per product to comply with the basic functional test requirements of this AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of this AD on U.S. operators to be \$19,040, or \$170 per product.

In addition, we estimate the following cost to do the optional modification to terminate the required repetitive functional tests. For Model P-180 Avanti airplanes, it will take about 40 work-hours and require parts costing \$2,000, for a cost of \$5,400 per product. For Model P-180 Avanti II airplanes, it will take about 40 work-hours and require parts costing \$4,000, for a cost of \$7,400 per product. We have no way of determining the number of operators that may choose this optional action.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2013-0967>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Amendment 39-16169 (75 FR 904, January 7, 2010), and adding the following new AD:

2014-09-04 **PIAGGIO AERO INDUSTRIES S.p.A:** Amendment 39-17839; Docket No. FAA-2013-0967; Directorate Identifier 2013-CE-042-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2009-21-08 R1, Amendment 39-16169 (75 FR 904, January 7, 2010).

(c) Applicability

This AD applies to PIAGGIO AERO INDUSTRIES S.p.A Model P-180 airplanes, serial numbers 1004 through 1218, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 32: Landing Gear.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as cases of un-commanded operation of switched off nose-wheel steering system caused by internal leakage of a steering select/bypass valve. We are issuing this AD to prevent loss of directional control on ground during take-off or landing, which could result in a runway excursion.

(f) Actions and Compliance

Unless already done, do the actions required in paragraph (f)(1) through paragraph (f)(5) of this AD, including all subparagraphs:

(1) At whichever of the compliance times specified in paragraph (f)(1)(i) and paragraph (f)(1)(ii) of this AD that occurs first and repetitively thereafter at intervals not to exceed 165 hours time-in-service (TIS), do a functional test of the nose landing gear (NLG) steering manifold following Part A1 or Part A2 of the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N. 80-0249, Rev. 3, dated July 22, 2013 (includes CONFIRMATION SLIP). Any functional test completed following either Part A1 or Part A2 resets the time counting towards the 165-hour TIS repetitive functional test to zero.

(i) Within the next 165 hours TIS after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD) or within the next 6 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs first; or

(ii) Within the next 165 hours TIS after the last inspection done in compliance with AD 2009-21-08 R1, Amendment 39-16169 (75 FR 904, January 7, 2010).

(2) Within the next 220 hours TIS after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD) or within the next 6 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs first, and repetitively thereafter at intervals not to exceed 660 TIS or 12 months, whichever occurs first, do a functional test of the nose landing gear (NLG) steering manifold following Part A1 of the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N. 80-0249, Rev. 3, dated July 22, 2013 (includes CONFIRMATION SLIP). Any functional test completed

following either Part A1 or Part A2 resets the time counting towards the 165-hour TIS repetitive functional test required by paragraph (f)(1) of this AD to zero.

(3) If, during any functional test required in paragraphs (f)(1) and (f)(2) of this AD, any NLG steering actuator movement discrepancy is detected, before further flight, replace the NLG steering manifold with a serviceable part as specified in Part A1 and Part A2 of the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N. 80-0249, Rev. 3, dated July 22, 2013 (includes CONFIRMATION SLIP).

(4) As of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), installation of a replacement NLG steering manifold or a replacement NLG is allowed, provided that, before release to service, the NLG steering manifold passes a functional test following Part A1 of the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N. 80-0249, Rev. 3, dated July 22, 2013 (includes CONFIRMATION SLIP).

(5) To terminate the repetitive functional tests required in paragraph (f)(1) and paragraph (f)(2) of this AD, at any time after the initial functional test required in paragraph (f)(1) and paragraph (f)(2) of this AD, you may modify the electrical configuration of the steering system following the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Recommended) N. 80-0285, dated September 30, 2013 (includes CONFIRMATION SLIP), or the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Recommended) N. 80-0286, Rev. 1, dated September 30, 2013 (includes CONFIRMATION SLIP), as applicable.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov.

(i) Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(ii) AMOCs approved for AD 2009-21-08 R1 (75 FR 904, January 7, 2010) are not approved for AMOCs for this AD.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) **Reporting Requirements:** For any reporting requirement in this AD, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing, and reviewing the collection of information. All responses to this collection of information are mandatory. Comments

concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(h) Related Information

Refer to European Aviation Safety Agency (EASA) AD No. 2013-0242R1, dated October 9, 2013, for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2013-0967-0002>.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N. 80-0249, Rev. 3, dated July 22, 2013 (includes CONFIRMATION SLIP).

(ii) PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Recommended) N. 80-0285, dated September 30, 2013 (includes CONFIRMATION SLIP).

(iii) PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Recommended) N. 80-0286, Rev. 1, dated September 30, 2013 (includes CONFIRMATION SLIP).

(3) For PIAGGIO AERO INDUSTRIES S.p.A service information identified in this AD, contact Piaggio Aero Industries S.p.A - Airworthiness Office, Via Luigi Cibrario, 4-16154 Genova-Italy; phone: +39 010 6481353; fax: +39 010 6481881; email: airworthiness@piaggioaero.it; Internet: <http://www.piaggioaero.com/#/en/aftersales/service-support>.

(4) You may view this service information at FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>

Issued in Kansas City, Missouri, on April 17, 2014.

Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.

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